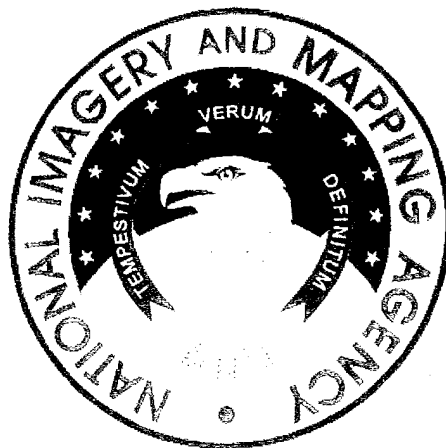


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Statement of Work

For the

National Imagery and Mapping Agency
(NIMA)

Enterprise Engineering
Contract

Version 2.1
9 April 2003

APPROVED FOR RELEASE ☐
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1 Scope

This Statement of Work (SOW) describes the required enterprise engineering activities for the National Imagery and Mapping Agency (NIMA) Enterprise Engineering contract. The Enterprise Engineering contractor will serve as the enterprise steward across NIMA and the National System for Geospatial Intelligence (NSGI). Their purview extends across NIMA mission and corporate systems and processes as they play a critical role in effecting transformation.

The NIMA Enterprise Transformation Integrated Process Team (NETIPT) Report contained specific recommendations for achieving and accelerating transformation. Regarding the acquisition of systems and services, the NETIPT realized the need for an all-encompassing engineering services contract to guide the transformation of NIMA into the premier Geospatial Intelligence provider. If the GeoScout contract is the key mechanism for delivering transformation capabilities, the Enterprise Engineering contract defines the "What", "When" and "How" of those capabilities. From a government perspective, the Chief Architect and Chief Engineer will ensure that NIMA's transformation is properly executed; they will oversee the Enterprise Engineering contractor. To that end, the following specific engineering focus areas are required of the Enterprise Engineering contract in order to support the Government in accomplishing the overall transformation of NIMA. These tasks include:

- Enterprise Architecture (Operational, Technical, and Enterprise Data Engineering), to include the After Next Architecture
- Corporate and Mission Business Processes (Tier 1 BPR), including Process Improvement and Horizontal Fusion/Integration across organizational boundaries
- Technical Planning and Policy, to include Chief Information Officer support
- System Engineering and Analysis of the NSGI end-to-end capabilities and interfaces with community and user systems
- Technology Insertion to facilitate and accelerate transformation
- Performance Modeling, and Measurements
- Systems Needs and Requirements Management
- Enterprise Engineering Tools
- Enterprise Risk Management
- Enterprise Configuration Management
- Independent Verification and Validation
- Readiness Reviews
- System and Technical Interface to Customers, to include coordination support for processes and services transformation

In addition, the Enterprise Engineering contract will have the normal Program and Contract Management tasks (e.g., Organization, staffing, Security, Cost Control and Reporting). The work tasks outlined above are organized in Section 3 under four categories: Strategic, Tactical, Operational, and Special Studies and Contingencies. The first three categories support three perspectives for the system engineering of the Enterprise.

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The Strategic perspective considers the fast-paced changing environment. It is imperative that a coherent strategy guides the enterprise, more than ever. Effective strategic planning can be an elusive goal regardless of the scope of transformation. The creation of the strategy itself is not usually the bigger obstacle in building an enterprise around a coherent guiding philosophy-rather, it's the failure to execute this vision. The importance of measuring strategy when seeking to align and focus an organization across all its resources is critical. The role of the Chief Engineer and Enterprise Engineering Contractor in ensuring that a strategic perspective is at the center of NIMA's measurement processes is a critical one, and as such, these tasks are all aimed at ensuring that strategic considerations are assessed across the enterprise.

The Tactical perspective is a companion challenge to a strategic perspective. It provides for the service to be responsive to the strategies and needs of the business units it purports to serve. A strategic perspective alone, notwithstanding the intent of providing benefits from a crosscutting view could end up becoming bureaucratic, unresponsive and inflexible. The strategic perspective absent a mission focus (i.e., the tactical perspective) would not deliver the desired benefits to its stakeholders. A balance between a strategic perspective and a tactical perspective should align the strategies of the Enterprise to the mission the enterprise supports so that they add value and are responsive to the customers they serve. As such, the tasks contained in Section 3 are all aimed at ensuring that the focus on delivery and closure is balanced against the broader perspective.

The Operational perspective, aside from the strategic and tactical perspectives, is equally important in that the execution phase of the contract not be forgotten. It is difficult to focus on the mission when trying to overcome difficulties of cost, or schedule, or performance. Having said that, the minutia of managing the contract successfully, and effortlessly, allows those who are focused on the strategic or tactical issues free to drive those issues to conclusion, absent distraction. Hence the need for a concise set of management tasks and activities which provides the framework against which the contract may be measured and conducted.

The last category, Special Studies and Contingencies, provides for those unknown tasks resulting from rapidly changing environments and situations.

1.1 Background

NIMA's mission is to "provide timely, relevant, and accurate geospatial intelligence in support of national security." Transformation within NIMA is essential if it hopes to continue to satisfy all of its customer needs for Geospatial Intelligence. The speed and tempo set by our adversaries, the evolving nature of warfare, and the rapid changes in technology make it essential that NIMA act with a sense of urgency. It cannot undertake transformation activities recklessly, but must increase the rate at which it conceives and implements new solutions for customer's needs while at the same time modernizing its internal processes and capabilities.

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Transformation in technology alone will not provide NIMA with the degree of flexibility required nor allow it to fully realize its potential as the nation's premier producer of Geospatial Intelligence. Significant changes must also be made in Doctrine, Organization, Training, Materiel, Leadership, Personnel, and Facilities. To that end, the Enterprise Engineering Contractor will assist NIMA in achieving its desired future state and help set the direction NIMA must take to transform.

NIMA has centered its transformation on Corporate Performance Measurement categories so as to directly link transformation to performance improvements. These categories reflect a balanced view of the Agency, and cuts across all Key Components. This naturally includes those activities that support NIMA's internal customers (NIMA workforce) who in turn can create higher value products and services for external customers, U.S. Departments and Agencies. The Enterprise Engineering contractor will play a critical role in measuring and monitoring progress in those categories, as well as performing business case analysis to consider and evaluate alternative plans and paths. The Enterprise Engineering contractor must and will provide deconflicted investment advice to the NIMA executive officers, serving as an honest broker of current and planned activities.

Specific areas in which the Enterprise Engineer will support NIMA's transformation are:

- Developing, establishing, reviewing, documenting, and refining the new NSGI business model and Tier 1 processes and rules based on the new NSGI business model. This applies to both corporate and mission business processes.
- Defining the operational and technical views of the architectures, and associated performance analysis parameters
- Ensure NIMA's geospatial assurance program is adequate to answer the threat
- Developing Geospatial Intelligence conceptual data models and standards
- Defining, supporting and negotiating NSGI end-to-end operational, technical, and performance requirements and interfaces
- Overseeing NSGI standards development activities
- Overseeing the development and maintenance of NIMA's Corporate performance Measurement Analysis and Reporting Program
- Ensuring that systems capabilities and data migration plans are in accordance with architectural guidelines and standards
- Managing a robust and flexible technology insertion planning process that balances stability and change in a manner that is responsive to dynamic mission needs
- Developing and managing a unified NIMA enterprise test strategy and processes

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- Conducting Independent Verification and Validation (IV&V) of satisfaction of requirements and interoperability
- Readiness assessment for transitioning new capability and upgrade deliveries into operation
- Providing readiness assessments
- Undertaking engineering tasks in support of NIMA senior executives
- Ensuring business processes and systems capabilities synchronize with mandated Community and DoD directives and initiatives

The Enterprise Engineering Contractor will facilitate the application of consistent, unified systems engineering principles, evolve technical and operational architecture views, and assure adherence to the standards in the technical architecture. Enterprise Engineering will have a greater guiding role with more responsibility than past NIMA engineering contracts. This strategy moves NIMA from segmented systems engineering support tasks to a unified *enterprise* engineering approach. The NIMA Chief Architect and the NIMA Chief Engineer in coordination with the NIMA CIO, will manage the enterprise architecture (enterprise architecture resulting from the award of the GeoScout contract).

It is intended that the Enterprise Engineering Contractor manage and ensure the end-to-end integrity of the NSGI, provide an operational description and requirements specification of the planned NSGI that will include: Concept of Operations (CONOPS), operational scenarios, intended deployment of capabilities over operational nodes, connectivity among these capabilities and nodes, interfaces to external systems and users, and system behavior in terms of use cases and data flows. The Enterprise Engineering Contractor will also manage the end-to-end integrity of the NIMA corporate business processes and provide descriptions, requirements, and interface specifications.

It is intended that the Enterprise Engineering Contractor document and establish a roadmap and schedule for the architecture, the test strategies, the security environment, the conceptual data model and the CONOPS. The Enterprise Engineering Contractor will ensure that the roadmaps converge at a common point in the same timeframe to efficiently deliver a performance capability. The Enterprise Engineering Contractor will chair or moderate permanent or ad hoc forums to facilitate and support the Government in accomplishment of NIMA's mission and functions.

2 Applicable Documents

2.1 Compliance Documents

- The Defense Acquisition System, current edition; (Replacement for DoD Directive 5000.1 (including Change 1), dated 23 October 2000)

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- Operation of the Defense Acquisition System, current edition; (Replacement for DoD Instruction 5000.2, dated 5 April 2002)
- DoD 5220.22-M; National Industrial Security Program Operating Manual (NISPOM); January 1995; (Change 2, May 1, 2000)
- DoD 8510.1-M; Department of Defense Information Technology Security Certification and Accreditation Process (DITSCAP); Application Manual; 31 July 2000
- DoD 5200.1R, "Information Security Program", January 1997
- DOD Directive 4630.5, Interoperability and Supportability of Information Technology (IT) and National Security Systems (NSS), January 11, 2002
- DoD Joint Technical Architecture (JTA), Version 4.0, 17 July 2002
- NSGI Operational Requirements Document (NORD) Defining NIMA's Programmatic Responsibilities to the NSGI, 21 February 2003
- Imagery and Geospatial-Information Capstone Requirements Document (IGCRD), 21 September 2000 (JROC Validated)
- Operational Requirements Document (ORD) for the Future Imagery Architecture (FIA), JROCM-068-98, 11 June 1998
- OMB Circular A-130 Management of Federal Information Resources Revised -- November 28, 2000, and Appendix III, Security of Federal Automated Information Resources, revised January 20, 2001
- Clinger-Cohen Act (Formerly Information Technology Management Reform Act (ITMRA) or, PL.104-106.)
- Government Performance and Results Act (GPRA) of 1993
- Government Paperwork Elimination Act (GPEA) of 1998
- Director of Central Intelligence Directive (DCID) 6/3, "Protecting Sensitive Compartmented Information Within Information Systems Manual", (DCID 6/3) - Manual, 3 May 2002
- IC CIO Information System Security Policy Series
 - IC CIO Intelligence Community Email Policy (U). 1 Jun 1999.
 - IC CIO Intelligence Community Directory Services Policy (U). 5 Oct 1999.
- NIMA Information Management policies to include the following:
 - NI 8010.2R2 Automated Information System Security (U). 19 Dec 2001.
 - NI 8010.3R3 Certification and Accreditation of Information Systems (U). 19 September 2002.
 - NI 8010.4R3. Automated Information System Security Engineering (U). 6 November 2002
 - NI 8010.11 NIMA-Controlled Computer Network Connectivity at Contractor and Other Facilities, 6 November 2001
 - NI 8400.1R2 Information Technology Purchases (U). 4 October 2002
 - NI 8400.3 Information Technology Investment Portfolio Management, 20 December 2001
 - NI 8400.4R1 Implementation of Sec 508 of the Rehabilitation Act, 20 February 2003
 - NI 8410.1R1 Implementation of Mobile Code (U). 16 September 2002
 - NI 8420.3 Firewall Policy and Implementation (U). 21 June 2002.

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- DoD CIO Guidance and Policy Memorandum # 12-8430-July 26, 2000
"Acquiring Commercially Available Software"
- DoD CIO Memorandum Public Key Infrastructure (PKI) Policy Update (U). 21 May 2002.
- DoD Public Key Infrastructure (PKI) Guidance and Policy Memorandum (U). 12 Aug 2000.
- DoD CIO Memorandum Public Key Enabling (PKE) of Applications, Web Servers, and Networks for the Department of Defense (DoD) (U). 17 May 2001.
- DoD CIO Memorandum Update to the Revised Defense Message System Transition Plan (U). 12 Apr 2001
- DoD Directive 8100.1, Global Information Grid (GIG) Overarching Policy, September 19, 2002.
- NIMA's Acquisition Director Memorandum, "Image Quality Responsibilities (U)". 15 May 2002.
- DoD Directive 5015.2, DoD Records Management Program, March 6, 2000

2.2 Reference Documents

- DoD Interim Defense Acquisition Guidebook. 30 October 2002
- Under Secretary of Defense for Acquisition, Technology, and Logistics Memorandum, Subject: Evolutionary Acquisition and Spiral Development, dated 12 April 2002
- American National Standards Institute, EIA 748-98
- CJCSI 6211.02A, Defense Information System Network and Connected Systems, 22 May 1996
- MIL-HDBK-1785, Systems Security Engineering Program Management Requirements, 1 August 1995
- "National Security Agency Security Recommendation Guides",
<http://nsa1.www.conxion.com/>
- OMB Memorandum M-97-02, "Funding Information Systems Investments" (October 25, 1996)
- OMB Memorandum M-97-16, "Information Technology Architectures" (June 18, 1997)
- NIMA Services Demarcation Transformation Plan 30 August 2002
- Joint Vision 2020, June 2000
- NIMA Statement of Strategic Intent 2002
- NIMA NETIPT Final Report, 26 August 2002
- NIMA Acquisition & Technology (AT) Migration Plan, 28 September 2001
- NIMA Corporate Transformation Business Plan FY03-04, FY04-05
- NIMA USIGS Draft ORD KPP Assessment Update, 16 July 2001
- TPED Modernization Plan Update (MPU), June 2000
- NSGI Enterprise Requirements Specification (NERS) Rev E, 16 May 2002
- Imagery and Geospatial Community (IGC) 2010 Concept of Operations (CONOPS), May 1999

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- NIMA Geospatial Intelligence Capstone Concept, January 2003
- NIMA Commercial Imagery CONOPS, March 2003 (Final DRAFT)
- NIMA Future Multi-Intelligence CONOPS
- NIMA-IMINT Joint Processes Manual (JPM), Version 1, 3 June 2002
- NIMA-IMINT Joint System Engineering Process Manual, Version 2, 26 February 2003 (DRAFT)
- NIMA Configuration Management Plan, 17 January 2002
- NIMA Enterprise Network Description and Requirements Document, N0201A, 28 March 2003
- Statement of Requirements (SOR) for the Future Imagery Architecture (FIA), 29 July 1998 (with amendments)
- Systems Operations Concept (SOC) for the Future Imagery Architecture (FIA), 29 July 1998
- Department of Defense, C4ISR Architecture Framework Version 2.0, 18 December 1997
- Joint Chiefs of Staff, CJCSI 3170.01B, Requirements Generation System, 15 April 2001
- Joint Chiefs of Staff, 3170.01C, Joint Capabilities Integration and Development System, 2003 (DRAFT)
- NSGI Systems Training Management Plan
- Joint Chiefs of Staff, CJCSI 6212.01B, Interoperability and Supportability of National Security Systems, and Information Technology Systems, 8 May 2000
- Intelligence Community System for Information Sharing (ICSIS)
- DoD Instruction 8500.2, Information Assurance Implementation, 6 February 2003
- NIMA Enterprise Information Assurance Program Plan (EIAPP)

3 Requirements

3.1 Strategic

3.1.1 Enterprise Architecture

3.1.1.1 General

- 3.1.1.1.1 The Contractor shall evolve and maintain the Enterprise view (AV-0) of the Architecture to include the subset of system view reflected in SV-1, the technical and the operational architecture views of the corporate business and mission processes for NIMA and NSGI. The architecture views shall be evolved and maintained in compliance with the DoD C4ISR Architecture using a Government approved Enterprise Architecture suite of tools. The Contractor shall support internal and external coordination of the architecture views.
- 3.1.1.1.2 The Contractor shall capture, define, and maintain corporate business and mission processes for NIMA and NSGI "as is" state and for the "to be" products and services. The "to be" products shall cover "Next" and "After Next" timeframes.

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- 3.1.1.1.3 The Contractor shall provide a report of the “to be” products and services within the architectural view at the first Enterprise Engineering Quarterly Program Review.
- 3.1.1.1.4 The Contractor shall coordinate identification of the Enterprise Architecture features with appropriate NIMA organizations and provide a cross-reference trace of features to other applicable frameworks (e.g. Federal Enterprise Architecture (FEA), Global Information Grid (GIG), etc.) and report the results twice annually at a formal review.
- 3.1.1.1.5 The Contractor shall support the NIMA Chief Architect in assuring that the GeoScout Contractor’s system view of the Enterprise Architecture is congruent with the operational and technical view of the Enterprise Architecture, and NIMA’s concept of operations. The Contractor shall consider the NIMA-developed future (“to be”) NSGI Operational and Systems Architecture views as strategic guidance.
- 3.1.1.1.6 The Contractor shall provide architecture based analysis support and technical analysis to NIMA’s Enterprise Architecture Council as deemed necessary by the Government.
- 3.1.1.1.7 The Contractor shall provide security engineering analysis for the enterprise, to include analysis of new blocks, programs and capabilities.
- 3.1.1.1.8 The Contractor shall provide continuing analysis of the Enterprise Architecture for potential counterintelligence threats.
- 3.1.1.2 Operational View
 - 3.1.1.2.1 The Contractor shall support development of NIMA’s operational architecture and the coordination of the architecture within NIMA and externally with NSGI stakeholders and partners.
 - 3.1.1.2.2 The Contractor shall support the development, evolution, and maintenance of NSGI CONOPS and associated operational views of the Enterprise Architecture.
- 3.1.1.3 Business Subset of Operational View
 - 3.1.1.3.1 The Contractor shall decompose, refine and maintain the NIMA/NSGI business model, identifying NSGI user relationships and their information needs.
 - 3.1.1.3.2 The Contractor shall capture and maintain key NIMA business rules.
 - 3.1.1.3.3 The Contractor shall establish and maintain value chains of key business threads for NIMA in support of the Corporate performance measurement, analysis and reporting program.
 - 3.1.1.3.4 The Contractor shall use value and activity chain analyses to identify the total cost of doing business in support of the Corporate performance measurement, analysis and reporting program.
- 3.1.1.4 Technical View
 - 3.1.1.4.1 The Contractor shall support the evolution, definition and maintenance of the technical view of the Enterprise Architecture.
 - 3.1.1.4.2 The Contractor shall support the implementation of a standards roadmap in development by the NIMA Chief Geospatial Intelligence Standards Officer (CGISO).
 - 3.1.1.4.3 The Contractor shall identify and recommend standards for interoperability and all areas of evolving standards and languages that should be considered for

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future incorporation into NSGI with rationale and estimates of benefits vs. impacts with recommended timelines.

- 3.1.1.4.4 The Contractor shall support the development and implementation of the open data content, exchange, and implementation standards for Geospatial Intelligence. These open standards shall rely primarily on commercial exchange standards that ensure interoperability across the NSGI.
- 3.1.1.4.5 The Contractor shall support the CGISO in updating acquisition guidance and the DoD Joint Technical Architecture for Geospatial-Information related standards.
- 3.1.1.5 Data Model
 - 3.1.1.5.1 The Contractor shall evolve and maintain the NSGI conceptual data model consistent with best industry practices, to include defining data content and interoperability.
 - 3.1.1.5.2 The Contractor shall provide and maintain an automated data model repository and associated suite of data modeling and analysis tools. The repository and associated tools shall be capable of maintaining traceability among the data models and with associated data content standards. The Contractor shall populate the repository with the NSGI conceptual data model, data content standards, subordinate logical data models, and physical data models provided by implementation program offices, i.e. GeoScout.
 - 3.1.1.5.3 The Contractor shall develop and maintain a roadmap for data model evolution.
 - 3.1.1.5.4 The Contractor shall evaluate architectural changes based on a data and standards view.
 - 3.1.1.5.5 The Contractor shall support the Government in monitoring compliance with the NSGI conceptual data model.
 - 3.1.1.5.6 The Contractor shall coordinate with the GeoScout Contractor to maintain referential integrity of the conceptual data model
 - 3.1.1.5.7 The Contractor shall provide and maintain a Data Migration Plan in contractor-specified format in accordance with architectural guidelines and standards to be reviewed annually.

3.1.2 After Next Architecture

- 3.1.2.1 The Contractor shall provide interface support for the future Architectures and Initiatives development. The Contractor shall provide systems engineering integration support for the Annual After Next Architecture Study and other studies as directed. The Contractor shall contribute Now and Next systems data, cost data, Modeling and Simulation collaboration, and impacts of programmatic changes to the NSGI Program Baseline as input to the After Next Architecture Study and other studies. The Contractor shall employ NIMA's view of the future ("to be") NSGI Operational and Technical Architecture as strategic guidance for development of Enterprise Architecture, GeoScout Block development, and system requirements changes to NSGI Program Baseline.
- 3.1.2.2 The Contractor shall provide technical interface support in assessments for future weapons systems, and associated impacts for geospatial intelligence needs, and the total cost of ownership for service weapons systems that have general or unique requirements.

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3.1.3 Corporate and Mission Business Processes

- 3.1.3.1 The Contractor shall decompose key business processes and process relationships necessary to transform NSGI and NIMA, identifying 2 to 3 levels of business processes and functions.
- 3.1.3.2 The Contractor shall develop in both network-centric and data-centric terms, the next level of the Business Model including any additional related tasks that are required for the Business Model.
- 3.1.3.3 The Contractor shall identify performance measures and targets to track evolution of the NSGI toward the Business model and recommend updates and modifications to NSGI ORD KPPs
- 3.1.3.4 The Contractor shall conduct Tier 1 business process reengineering activities across NIMA and make recommendations to the Chief Engineer, Chief Architect, and the NIMA Transformation Program Manager to enhance NIMA's performance and better use NIMA's resources. The recommended processes shall be reviewed with NIMA's mission partners to ensure they are complementary and with the GeoScout Contractor to assess any ongoing or planned modernization impacts.
- 3.1.3.5 The Contractor shall support the definition of Geospatial Intelligence Assurance (GA) attributes reflective of the quality, integrity, and safety of the NIMA mission information.
- 3.1.3.6 The Contractor shall support the CGISO in cross-organizational efforts to define/refine GA attributes and potential methods for their capture or generation.
- 3.1.3.7 The Contractor shall support the CGISO and GA team to define system requirements reflective of needs that allow both generation and retention of GA attributes, visualization tools and processes.
- 3.1.3.8 The Contractor shall establish and refine governance processes of the Enterprise Architecture (EA) in concert with the NIMA Chief Architect.
- 3.1.3.9 The Contractor shall establish and refine governance processes of Enterprise Engineering in concert with the NIMA Chief Engineer.
- 3.1.3.10 The Contractor shall establish and refine roles and alignment of business processes and Information Technology (IT).
- 3.1.3.11 The Contractor shall, in coordination with NIMA organizations, work with the NSGI stakeholders and partners to identify, recommend, and establish new business process/practices to take advantage of new technology and more efficient and effective ways of doing business. The approach shall address the need to gain customer and end-user buy-in to new business processes, practices, and technologies. The Contractor shall review recommended process changes with the GeoScout Contractor to assess any ongoing or planned modernization impacts.
- 3.1.3.12 The Contractor shall perform an Enterprise assessment for any proposed business process changes resulting from GeoScout block insertion recommendations.

3.1.4 Chief Information Officer Support

- 3.1.4.1 The Contractor shall ensure compliance of Enterprise Engineering contract support activities with the Clinger-Cohen Act, Government Paperwork Elimination Act, Government Performance and Results Act, and other germane

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guidance relative to public law or oversight authorities such as Office of the Secretary of Defense for Command and Control, Communications and Intelligence or Intelligence Community Management Staff, etc. Additionally the Contractor shall stay abreast of initiatives and decisions that impact the Chief Information Officer (CIO) and provide recommendations as appropriate.

- 3.1.4.2 The Contractor shall ensure traceability of all activities under this contract with NIMA's management and tracking of Information Technology (IT) and Information Services (IS) investment and expenses consistent with investment portfolio practices at NIMA.
- 3.1.4.3 The Contractor shall identify and review industry and government best practices for IT/IS management and oversight. The Contractor shall recommend promising new practices, processes and methodologies to the CIO for consideration and adoption. The Contractor shall develop business cases and implementation framework for the recommendations requiring further consideration, as requested by the CIO.
- 3.1.4.4 The Contractor shall provide studies, analysis and implementation of functions and practices relevant to the CIO upon request.
- 3.1.4.5 The Contractor shall conduct planning and review of CIO support and other relevant sections of this contract and provide status as appropriate at program reviews.
- 3.1.4.6 The Contractor shall be responsible for complying with and monitoring its execution in accordance with the NIMA Enterprise Information Assurance Program Plan (EIAPP). The Contractor shall also provide input to the modification or development of each EIAPP revision.

3.1.5 Technical Planning

- 3.1.5.1 The Contractor shall support NIMA, in its work with NSGI stakeholders and partner organizations in the development of future system plans/concepts/architectures in response to mission, technical or operational drivers in the future budgets (POM/IPOM and beyond).
- 3.1.5.2 The Contractor shall provide end-to-end engineering and analysis between NIMA and external partners, to include functional and performance allocation, interface definition and negotiation, information/image quality, and reconciliation of NSGI architecture with other architectures.
- 3.1.5.3 The Contractor shall support NIMA in the development of NSGI enterprise level requirements and cost impacts in support of planning and analysis against future concepts, mission, technical or operational events (Future sensors, significant mission/operational changes, breakthroughs in technology etc.).
- 3.1.5.4 The Contractor shall analyze the effects that significant mission, technology or operational changes have on NSGI system, networks, and architecture in order to develop a migration strategy to support program development and budget/program planning.
- 3.1.5.5 The Contractor shall support NIMA in the assessment of NSGI architectural impacts based on emerging customer needs discovered through the community processes and boards (including the Defense Acquisition Board (DAB), Joint

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- Requirements JROC, etc.) for new weapons, systems, or processes with Geospatial Intelligence needs.
- 3.1.5.6 The Contractor shall support NIMA elements in developing future CONOPS, enterprise level community requirements documents (Imagery and Geospatial-Information Capstone Requirements Document (IGCRD)) and/or other future planning documents (CDRL A001).
- 3.1.5.7 The Contractor shall support NIMA in coordinating changes to implementation plans and requirements across the NSGI with appropriate NIMA O&S, Heritage/Legacy, and GeoScout Contractors.
- 3.1.5.8 The Contractor, in coordination with appropriate NIMA offices and the GeoScout and existing Contractors, shall develop mid- and long-range migration plans/strategies for system to system (to include networks), corporate, enterprise, and community wide activities (network and communication, data migration, long term archival, etc.) (CDRL A002).
- 3.1.5.9 The Contractor shall verify that NSGI capabilities migration plans can be implemented with acceptable risks.
- 3.1.5.10 The Contractor shall define and support execution of post- data migration validation methods.
- 3.1.5.11 The Contractor shall, in coordination with appropriate NIMA offices, draft and coordinate upon approval a technical program baseline each year to serve as the guiding technical foundation for NSGI acquisition program development and assess the impacts of significant technological/programmatic change to that baseline.
- 3.1.5.12 The Contractor shall provide the necessary expertise to develop independent cost estimates and validate cost estimates provided from other sources as directed by the Government in support of the NIMA's Chief Architect and other NIMA offices.
- 3.1.5.13 The Contractor shall support NIMA offices in conducting schedule, performance, and cost trades, and cost-benefit analysis to serve as the basis for programmatic decisions and planning.
- 3.1.5.14 The Contractor shall support NIMA offices in the development of enterprise level planning schedules.
- 3.1.5.15 The Contractor shall develop, evolve and maintain NIMA's single integrated Corporate and NSGI Enterprise Master Schedule (CDRL A003), to include all activities and training that affect the program baseline. The Contractor shall include milestones and activities in the Master Schedule linked to show dependencies and shall coordinate with GeoScout Contractor to deconflict NSGI system input as schedule changes are received. The Contractor shall maintain configuration control of the schedule and provide traceability of changes for historical records.
- 3.1.5.16 The Contractor shall insure that the Master Schedule Database supports critical path analysis for the Enterprise, Projects and Segments. The Contractor shall provide a capability, for Government only access, which links the Master Schedule entries with their associated costs.

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- 3.1.5.17 The Contractor shall recommend a standardized list of level 0 and 1 Milestone events to be used by NIMA and associated Contractors and shall monitor compliance with the approved list.
- 3.1.5.18 The Contractor shall perform comprehensive security engineering in support of architecture development and enterprise level planning and programming.
- 3.1.5.19 The Contractor shall, in coordination with the GeoScout developed Enterprise Security Architecture, develop the NSGI Information Security and Assurance Concept of Operations (CONOPS) (CDRL A004) and support implementation monitoring and compliance oversight. The Contractor shall provide updates to the CONOPS as required.
- 3.1.5.20 The Contractor shall develop operational scenarios and corresponding data threads to support early test design and test planning.
- 3.1.5.21 The Contractor shall develop and maintain a Command, Control, Communication, Computers, and Intelligence (C4I) Support Plan (C4ISP) using the DoD Interim Defense Acquisition Guidebook for content guidance (or updated DoD guidance). The Enterprise Engineering Contractor shall coordinate with the GeoScout Contractor as necessary to obtain required information. The initial C4ISP shall be delivered for Government approval within 120 days of contract award (CDRL A005).
- 3.1.5.22 The Contractor shall assist the Government in the planning and allocation of requirements and capabilities to future GeoScout blocks, to include the assessment of the GeoScout Contractor's recommended approach to business process changes, technology insertion and system transitions, and the associated business cases.
- 3.1.5.23 The Contractor shall perform Enterprise communications and network analysis and evaluation, and propose efficiencies for the topology, protocols, configuration items, trade analysis, strategies, and long term plans.

3.1.6 Horizontal Fusion/Integration

- 3.1.6.1 The Contractor shall provide support to projects, programs, or activities crosscutting organization functions or temporal focus (for example; image quality, security engineering, commercial imagery). Contract integration and engineering for these efforts shall be one of the methods supporting horizontal fusion for NIMA and NSGI CONOPS.
- 3.1.6.2 The Contractor shall provide crosscutting analysis for approved new capabilities, technologies and programs to provide a complete enterprise approach assessment.
- 3.1.6.3 The Contractor shall support analysis of NIMA capital investment plans and business cases, as directed by the Government, to determine the value of the business and data processes, and to identify impacts to the total cost of ownership and return on government assets.
- 3.1.6.4 The Contractor shall, within 45 days of contract award, provide to the Government for approval, a set of plans and processes for interfacing with the GeoScout, Heritage/Legacy, and O&S contractors to avoid duplication of efforts or lack of support, and to facilitate coordination. (CDRL A006) The Contractor, in cooperation with the GeoScout, Heritage/Legacy, and O&S contractors, shall identify potential conflict areas, and propose a mitigation strategy to preclude

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mission-impacting, cross-contract, intra and inter-contract conflicts. Where changes to the roles and responsibilities are mutually agreed-to by the relevant contractors, these changes shall be provided to the Government for approval.

3.2 Tactical

3.2.1 Systems Needs and Requirements (SNR) Management

3.2.1.1 The Contractor shall, within 90 days of contract award, define an integrated, end-to-end, system needs and requirements (SNR) management process (CDRL A007) which uses processes and best practices consistent with a Capability Maturity Model (CMM) (or equivalent process maturity model) Level 3 or higher. The process shall define the activities of all process participants, including the Contractor's, the Government's, and requirements implementers (GeoScout, Heritage, and Legacy Contractors). The Contractor shall implement the process within 90 days of Government approval. The Contractor shall include as input to the SNR management process: (1) Proposed and approved changes to the Enterprise Architecture (Operational, Technical, System, and Data Views); (2) Proposed and approved changes to NSGI and NIMA-corporate business processes; (3) Mission analyses conducted by the Contractor and NSGI stakeholders; (4) Proposed and approved changes to the Requirements Generation System's mission area integrated architectures; (5) Proposed and approved changes to the NIMA Operational Requirements Document; (6) the Requirements Generation System's mission area focused and capabilities-base document and Operational Requirements Documents from NSGI stakeholders; (7) Direct, specific requests from NSGI stakeholders; and (8) Specific requirements issues raised by NIMA corporate business application and NSGI implementers (GeoScout, heritage, and legacy contractors). The Contractor shall provide an output capability from the SNR management process that produces precise statements of requirements, including rationale, design constraints, performance, interface requirements descriptions, risk, cost, schedule, and technical implications in:

- recommendations for changes to the Enterprise Architecture, NSGI and NIMA corporate business processes to be reported quarterly;
- the DoD Requirements Generation System's mission area integrated architectures;
- the NSGI Operational Requirements Document (NORD), or other equivalent requirements documents (including the Key Performance Parameters);
- NIMA corporate business requirements;
- NSGI system-level requirements; and
- NSGI segment-level requirements

3.2.1.2 The Contractor shall manage, monitor, measure, and control the SNR management process, process outputs, and related tools to ensure they remain responsive, effective, and efficient.

3.2.1.3 The Contractor shall provide SNR process and database interface requirements to NSGI Stakeholders and appropriate contractors (CDRL A007).

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- 3.2.1.4 The Contractor shall provide initial and periodic refresher training to all SNR process participants IAW the approved process (CDRL A007).
- 3.2.1.5 The Contractor shall conduct mission analyses that are comprehensive, iterative, inclusive of stakeholder needs, and are systematic analyses of inputs on both an annual and as-required basis.
- 3.2.1.6 The Contractor shall support the implementation of the Operations and Sustainment (O&S) Framework.
 - 3.2.1.6.1 The Contractor shall make available engineering resources for the purpose of planning and ensuring the execution of the O&S Framework interfaces to GeoScout and Enterprise Engineering processes and functions.
 - 3.2.1.6.2 The Contractor shall provide for special studies collaboration with government and contractor O&S planning, production, and COR staffs.
 - 3.2.1.6.3 The Contractor may propose, review, coordinate, and arbitrate new systems interface standards affecting O&S, but ensures these initiatives are tested prior to deployment.
 - 3.2.1.6.4 The Contractor shall support O&S requirements for advanced and integrated risk analyses, performance reporting, network and system analyses to ensure optimum sustainment of the Agency's IT infrastructure.
- 3.2.1.7 The Contractor shall ensure all requirements documented in the NSGI Operational Requirements Document and NSGI system-level documents are necessary, complete, correct, compatible, consistent, unambiguous, and traceable to higher-level requirements.
- 3.2.1.8 The Contractor shall create and maintain an automated, comprehensive database (CDRL A008) of requirements information that is used by the Government and the Contractor to conduct the SNR analyses. The Contractor shall include in the requirements database the SNR process inputs and outputs, baseline requirements documents, requirements traceability matrices, and any other information considered necessary for the conduct of SNR analyses. The Contractor shall provide web-based access to the requirements database and associated tools on-demand by the Government, NSGI stakeholders, and NSGI implementers (GeoScout, heritage, and legacy contractors). The Contractor shall include a reference for each enterprise level requirement to the relevant NSGI KPP or Corporate performance measures and the responsible office.
- 3.2.1.9 The Contractor shall migrate existing NIMA and NSGI requirements, and GeoScout provided NSGI requirements information into the requirements database (CDRL A008).
- 3.2.1.10 The Contractor shall report SNR process measurements and any recommended process improvements to the Government as appropriate at formal program reviews.
- 3.2.1.11 The Contractor shall implement process improvements approved by the Government.
- 3.2.1.12 The Contractor shall provide updates to the SNR Process Description (CDRL A007), updates to process metrics, training to SNR process participants, updates to tools and databases, and actual use of the updated process for each Government approved implementation.

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3.2.2 Performance Modeling and Measurements

3.2.2.1 The Contractor shall within 90 days of contract award provide an initial modeling and simulation process and the process and tool description (CDRL A009) to support their evolution of the operational and technical architecture, management of the Corporate and Mission Business Process, Systems Needs and Requirements, Technical Planning, and New Technology Insertion. The Contractor shall implement the modeling and simulation process within 90 days after approval by the Government and provide updates and refinements as needed.

3.2.2.2 The Contractor shall in coordination with appropriate NIMA offices, develop, evolve, and maintain models and simulations (CDRL A010) to support all aspects of the Enterprise Architecture, to include but not limited to:

- Source allocation broker and tasking processes
- Throughput and delay associated with Information Exchange Requirements (required, specified, and actual);
- Processing, Input, and Output loading associated with all architectural components (e.g. segments) (required, specified, and actual);
- Communications network offered load, throughput, and delay (required, specified, and actual);
- Reliability, Maintainability, Availability (RMA) model of each architectural component and the architecture as a whole.
- Image Chain Analysis (ICA)
- Business Process Models

The Contractor shall use actual data when available and these models and simulations to predict actual performance and performance shortfalls based on established requirements. The Contractor shall report these predictions and recommendations for issue resolution at appropriate program reviews.

3.2.2.3 The Contractor shall host a quarterly forum independent of the Monthly/Quarterly Program Review to validate their modeling and simulation activities with Subject Matter Experts (SMEs)

3.2.2.4 The Contractor shall within 90 days of award of contract provide a Performance Metrics Plan (CDRL A011) that supports the Corporate Performance Measurement, Analysis, and Reporting Program and considers the current NIMA metrics efforts applicable to the Enterprise. The Plan shall be in a Contractor-selected format and define the Enterprise metrics to be captured, refined, and maintained with a rationale for each metric's impact on NIMA's mission, linking use of information and methods to measurements for success. The Plan shall also define the process for capturing metrics that will include acceptance of metrics data captured by the GeoScout and O&S contractors.

3.2.2.5 The Contractor shall capture, maintain, monitor, analyze, and evaluate performance metrics and related business rule metrics in accordance with the Performance Metrics Plan.

3.2.2.6 The Contractor shall develop and maintain business process models that both identify bottlenecks and target investment areas that support Government's decisions on business process re-engineering.

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- 3.2.2.7 The Contractor shall report performance metrics and modeling trends and issues monthly at program reviews and related fora. Reports at program reviews shall include recommendations for Government and Contractor actions based on the reported results.

3.2.3 Enterprise Engineering Tools

- 3.2.3.1 The Contractor shall within 90 days of contract award, identify and recommend to the Government a suite of Enterprise Engineering standard tools (CDRL A012), along with a schedule for their implementation. The Contractor shall consider tools such as, but not limited to, requirements management, configuration management, modeling and simulation, data engineering, workflow, cost estimating, and other architecture tools for inclusion in a standard tool suite. The Contractor shall ensure the standard tools suite will be integrated, consistent with industry best practices, and that the standard tools suite shall provide support for all Enterprise Engineering aspects of this contract. The Contractor shall consider the tools already in use and any known planned future tools when making their recommendation. The Contractor shall procure/implement tools upon Government approval and make recommendations to the Government for changes or additions to the standard tools suite as appropriate.

3.2.4 Technology Insertion

- 3.2.4.1 The Contractor shall develop an Enterprise technology insertion process (CDRL A013), within 90 days of contract award. The process shall facilitate insertion of technologies discovered and refined within the Geospatial Intelligence Advancement Testbed, or other sources, and accommodate rapid movement of technology through the NSGI Pre-Production Environment (NPE), into the NIMA production (operational) baseline. The Contractor shall provide system engineering support to coordinate processes, schedules, and deliverables for insertions, and an analysis of opportunities to influence Business Process Reengineering within the NSGI. The Contractor shall implement and maintain the process within 90 days of Government approval.
- 3.2.4.2 The Contractor shall provide a technical pros/cons evaluation of each technical insertion candidate that includes an analysis of impacts of technology insertion change to NIMA's vision, mission, production, future GeoScout blocks/spirals, or any aspect of the Enterprise Architecture. The evaluation shall consider the business cases provided by GeoScout, Heritage/Legacy and O&S Contractors and include a recommended priority for insertion.
- 3.2.4.3 The Contractor shall manage NIMA's Technology Insertion Board process and act as Secretariat. The Contractor shall manage the current technology insertion process until the approved Enterprise technology insertion process is implemented.
- 3.2.4.4 The Contractor shall provide support to the Chief Engineer through oversight and the IV&V process for all technology insertion items.

3.2.5 Enterprise Risk Management

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- 3.2.5.1 The Contractor shall within 90 days of award provide an initial integrated Enterprise Risk Management Process (CDRL A014) and a Risk Management Transition Plan (CDRL A015) to move from current process to an integrated process. The integrated Enterprise Risk Management process should use processes and best practices consistent with a Capability Maturity Model (CMM) (or equivalent maturity model) Level 3 or higher. The Contractor shall provide an ongoing review of the process and propose updates and improvements as required. The Contractor shall, at contract award execute and maintain the current NIMA Risk Management process.
- 3.2.5.2 The Contractor shall coordinate with the GeoScout, Heritage/Legacy, and O&S Contractors on NSGI risk issues that impact the enterprise-level risk issues at combined monthly risk review meetings.
- 3.2.5.3 The Contractor shall continuously assess the risks associated with the end-to-end NSGI, facilitate and perform risk mitigation efforts and analysis, and recommend and monitor risk mitigation activities.

3.2.6 Enterprise Configuration Management

- 3.2.6.1 The Contractor shall within 90 days of award of contract provide and maintain an initial integrated NIMA Enterprise Configuration Management process (CDRL A016) with emphasis on the coordination process with NIMA and the GeoScout, Heritage/Legacy, and O&S Contractors, and the Mission Partners on NSGI CM issues. The process shall encompass facilities, systems and processes. The Contractor shall provide an ongoing review of the process and propose updates and improvements as required. The Contractor shall, at contract award, execute and maintain the current NIMA Configuration Management process until the Enterprise Configuration Management process is implemented.
- 3.2.6.2 The Contractor shall manage the Enterprise level CM board process.
- 3.2.6.3 The Contractor shall coordinate with NIMA and the GeoScout, Heritage/Legacy, and O&S Contractors on NSGI CM issues that impact the enterprise-level CM process at a combined monthly CM review meeting.
- 3.2.6.4 The Contractor shall maintain CM control of the enterprise architecture and functional and allocated baselines developed or maintained under this contract.
- 3.2.6.5 The Contractor shall provide support to the Consolidated System Engineering Requirements Board (CSERB), or similar replacement board, adjudicating, action item assignments, and tracking status and closure of Deficiency and Problem Reports generated by the ITF and the NIMA customers.
- 3.2.6.6 The Contractor shall provide web-based limited access to the enterprise configuration, and associated tools, to NSGI Stakeholders and NSGI implementers.

3.2.7 Independent Verification and Validation.

- 3.2.7.1 The Contractor shall, within 90 days of award of contract, develop and provide an initial integrated Enterprise Test and Evaluation (T&E) process (CDRL A017) which uses processes and best practices consistent with a Capability Maturity Model (CMM) (or equivalent process maturity model) Level 3 or higher. The Contractor shall address Independent Verification and Validation (IV&V) as part

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of this process. The Contractor shall review the initial process and submit updates 180 days after contract award.

- 3.2.7.2 The Contractor shall support NIMA's test organizations and the ITF to provide the independent verification and validation test function for NIMA and DOD Intelligence Information Systems. The Contractor shall manage, facilitate and execute the NIMA Enterprise Engineering test and evaluation (T&E) processes.
- 3.2.7.2.1 The Contractor shall verify that GeoScout, Heritage/Legacy Contractors, and all Directorate test plans are complete and address the Enterprise integration of other requirements, as appropriate.
- 3.2.7.2.2 The Contractor shall develop and maintain an Enterprise Master Test and Evaluation Schedule and provide input and updates to the Enterprise Master Schedule as needed.
- 3.2.7.2.3 The Contractor shall, within 90 days of contract award, create and maintain an automated comprehensive test database (CDRL A018) that traces each funded requirement in the SNR Requirements Database (CDRL A008) and consists of test objectives, verification and validation methods, testing activity and responsible party.
- 3.2.7.3 The Contractor shall verify the requirements traceability and the cross references of the verification methods for all NIMA-generated NSGI requirements documents.
- 3.2.7.4 The Contractor shall provide Test Planning and Execution (or witnessing) support to the ITF.
- 3.2.7.5 The Contractor shall generate test reports that reflect the results of site(s) and ITF testing for Beta 1 tests. The test reports shall capture the results of a formal test to include the following: purpose of the test, test dates, test location, participants, equipment profiles, software version numbers, network configurations, any other ancillary information deemed necessary, results of the test activity (Pass, Pass with Liens, or Fail), identification of all Problem Reports/Deficiency Reports with priority, and final recommendation to the MDA.
- 3.2.7.6 The Contractor shall provide ITF environment support to include planning, scheduling, prioritizing, and shall specify and assist with ITF configurations as identified for each test plan.
- 3.2.7.7 The Contractor shall provide Enterprise test issue investigation (analysis, inspection, and recommendations for resolution).
- 3.2.7.8 The Contractor shall conduct Independent Verification and Validation (IV&V) for satisfaction of requirements, interoperability, and readiness assessment for new capability deliveries.
- 3.2.7.9 The Contractor shall in coordination with GeoScout and as directed by the Government develop and coordinate interoperability and integration test plans. The Contractor shall determine the test conditions required to drive interoperability and integration activities, assuring these conditions are addressed in the plans.
- 3.2.7.10 The Contractor shall coordinate with and assist external test agencies responsible for joint interoperability T&E.

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- 3.2.7.11 The Contractor shall review and analyze NIMA-endorsed external interface requirements documents for new and Heritage/Legacy Test articles and identify those articles that require external test agency certification activities.
- 3.2.7.12 The Contractor shall develop and maintain an Enterprise-level Test and Evaluation Master Plan (TEMP) (CDRL A019), in coordination with the GeoScout, Heritage/Legacy, Mission Partners, and O&S Contractors, to be provided to the Government within 90 days of contract award.
- 3.2.7.13 The Contractor shall use and refine the Government-approved TEMP to analyze Enterprise and NSGI requirements documents and CONOPS.
- 3.2.7.14 The Contractor shall provide annexes to the TEMP to reflect capability updates to the enterprise baseline to include test strategy, approach, and resource requirements.
- 3.2.7.15 The Contractor shall coordinate changes to the TEMP with developers of new capabilities.
- 3.2.7.16 The Contractor shall provide a process to ensure image quality is tested and supported at the ITF. The Contractor shall maintain and control operational and other test imagery, test plans, and test reports in support of image quality assessments and evaluations.

3.2.8 Readiness Reviews

- 3.2.8.1 The Contractor shall in coordination with GeoScout, Heritage/Legacy, and O&S Contractors, develop and document a Readiness Process (CDRL A020) to provide visibility and understanding sufficient for supporting the Government's milestone decision activities. The Contractor shall develop the process within 90 days of contract award and implement the process within 90 days of Government approval.
- 3.2.8.2 The Contractor shall provide support to the Government in coordinating, facilitating, and executing readiness.
- 3.2.8.3 The Contractor shall develop a checklist and identify entrance and exit criteria for each readiness review that are traceable to the KPPs (or similar performance measures) and other requirements documented in the NSGI Operational Requirements Document. The Contractor shall review the checklist, and related entrance and exit criteria, with the Program Office and the GeoScout, Heritage/Legacy and O&S Contractors consistent with the Government approved readiness process.
- 3.2.8.4 The Contractor shall develop recommended attendees, agendas, minutes and recommended action items for Readiness Reviews. The Contractor shall distribute agendas, minutes, and action items after Government approval.
- 3.2.8.5 The Contractor shall provide independent assessments of status and readiness to proceed to the next milestone, consistent with the Government approved readiness process.

3.2.9 System and Technical Interface to Customers

- 3.2.9.1 The Contractor shall provide system and technical interface support to NIMA Directorates and offices for various customer missions, unique needs and environments (such as Commands and Services).

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- 3.2.9.2 The Contractor shall assist NIMA in resolving customer system and technical interface issues.
- 3.2.9.3 The Contractor shall make accessible to the customer, via a web-based site, information on NIMA' system information, technical briefings, and related material, in accordance with Government direction.
- 3.2.9.4 The Contractor shall develop and support a process to consolidate and simplify NIMA customer information, specific to each Command. Process shall provide for a single focused communication for each Command that extracts and consolidates GeoScout, Heritage/Legacy, O&S, and any other site/Command information specific to the Command.
- 3.2.9.5 The Contractor shall integrate detailed system deployment schedules in the Master Schedule for all NSGI stakeholders and communicate proposed changes to that baseline schedule.
- 3.2.9.6 The Contractors shall work with the various customer sites to develop mission/functions, architectures, CONOPS, site plans and organizational interfaces to facilitate systems and technical planning, requirements definition, and adjudication. The Contractor shall work with the GeoScout Contractor as necessary to include the GeoScout provided information such as scheduled block capability delivery information.
- 3.2.9.7 The Contractor shall support NIMA in representing unique customer needs, interests, and concerns at various systems and technical fora, as directed by the Government.
- 3.2.9.8 The Contractor shall develop, evolve, and maintain a Product Quality (PQ) Watch group to support image quality customer support and to assist risk mitigation and assure end-to-end product quality. The PQ Watch shall capture, investigate, and track the assessment and resolution of Product Quality issues and support requests in both the user and developer communities.
- 3.2.9.9 The Contractor shall aggregate and maintain the configuration management details for NIMA maintained systems at each site, which shall include at a minimum, NIMA baselines, network configurations, applications, desktop configurations, and external interfaces.
- 3.2.9.10 The Contractor shall provide engineering support and analyses to joint system engineering activities, including joint engineering review boards, working groups, risk management, schedule management, performance modeling, and test/demonstration planning, as determined by the Government.
- 3.2.9.11 Operational Support
 - 3.2.9.11.1 The Contractor shall support the development of operational concepts, plans and programs that incorporate the NSGI enterprise level plans and programs.
 - 3.2.9.11.2 The Contractor shall support the development and prioritization of research and development, technical, systems, operational, data and training requirements associated with ongoing analysis and production operations.
 - 3.2.9.11.3 The Contractor shall support the interaction between the Analysis and Production Directorate's internal requirements management process and the NSGI requirements management process to include all associated requirements, technology insertion, engineering, cost analysis, configuration management and transition integration fora.

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- 3.2.9.11.4 The Contractor shall support the operational and systems engineering needed to assess the potential affect of proposed changes to the NSGI on current operations, training and facilities.
- 3.2.9.11.5 The Contractor shall support the development of operational analysis and production flows that maximize the functional and performance capabilities of the NSGI to include data stewardship, conflation, population and maintenance strategies that result in improved currency, accuracy, coverage and content of geospatial intelligence.
- 3.2.9.11.6 The Contractor shall support the transition planning and decommissioning of existing operational systems.
- 3.2.9.11.7 The Contractor shall support the measurement of Analysis and Production operations against the NSGI ORD KPP's and other agency level corporate performance metrics.

3.2.10 Coordination Support for Processes and Services Transformations

- 3.2.10.1 The Contractor shall provide NIMA with coordination support for the following:
- Disestablishing products and services that are no longer the most effective solution for the customer
 - To introduce and incorporate new services and products, and assist in development of CONOPS as needed
 - To rapidly insert new processes and models in response to demands for surge or crisis production
 - Transition to new business processes
 - To maximize the value of customer generated data sent to NSGI for incorporation

3.3 Operational

3.3.1 Program Management

- 3.3.1.1 The Contractor shall implement at contract award, their Government approved Management Plan to plan, monitor, and control technical, cost, and schedule performance.
- 3.3.1.2 The Contractor shall manage the work activities of this contract, avoiding duplication with other NIMA efforts and ensuring integrated work efforts across tools, processes, products and resources.
- 3.3.1.3 The Contractor shall ensure that engineering efforts are accomplished in a disciplined approach consistent with industry standards.
- 3.3.1.4 The Contractor shall develop and propose, at appropriate program reviews, innovative alternatives for System Engineering challenges while constantly increasing the efficiency of resource utilization.
- 3.3.1.5 The Contractor shall provide key technical leadership to the engineering activities.
- 3.3.1.6 The Contractor shall interface with all NIMA organizations, Oversight organizations, NSGI stakeholders and partners.
- 3.3.1.7 The Contractor shall provide appropriately skilled personnel, as identified in the Contractor's approved Management Plan.
- 3.3.1.8 The Contractor shall have at time of contract award a facility/facilities within the National Capitol Region (NCR) with capacity to house personnel proposed for the NCR. Some work may be performed at other locations. The Contractor shall

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ensure all facilities (both prime and sub-contractor) used in support of the contract are cleared for the level of security (SCIF and AIS system accreditation at SI/TK/B level) required to perform the work under this contract at time of award and in accordance with the Government's industry security program. The Contractor shall ensure that the necessary communications infrastructure is in place within the facilities to enable ready certification of voice and data access at the level of security required to perform the work under this contract.

- 3.3.1.9 The Contractor shall have contingency operations and disaster recovery plans for these facilities, to include any government data being developed or maintained.
- 3.3.1.10 The Contractor shall have collaborative capability with subcontractors when subcontractors are not co-located with the prime.
- 3.3.1.11 The Contractor shall host and support formal and informal reviews and meetings as directed by the CO, COR, and NIMA Program Manager to include Enterprise Engineering Quarterly Program Reviews, Monthly Executive Sessions and Monthly Program Reviews at the contractor facility. The first Monthly Program Review shall occur 45 days after contract award. The Quarterly and Monthly Program Reviews shall report progress, status, issues, and findings of work performed, or special related topics. The Contractor shall propose agenda topics for Government approval. The Contractor shall submit proposed agendas to the Government 5 work days before Monthly Program Reviews and 30 days before Quarterly Program Reviews. The Contractor shall prepare and submit meeting minutes for approval not later than 10 days following the meeting. (CDRL A021)
- 3.3.1.12 The Contractor shall communicate Enterprise Engineering program and activity status and dependencies at appropriate fora.
- 3.3.1.13 The Contractor shall implement, upon Government approval, their proposed Transition Plan in coordination with the NSES, GeoScout, and other applicable Contractors.
- 3.3.1.14 The Contractor shall not purchase Government property without receiving prior approval from the Contracting Officer. When authorization has been granted the contractor shall perform a cost benefit analysis and use GSA Pricing when it clearly affords the best price and conditions for the Government. The Contractor shall coordinate with the COR to ensure NIMA Standard equipment/software is purchased by Enterprise Engineering. All NIMA non-standard equipment/software must be granted a waiver before such items may be purchased.
- 3.3.1.15 The Contractor shall provide an Integrated Data Environment (IDE) consisting of the tools, schedules, information systems, models and simulations, databases, and other data products/deliverables of this contract. The IDE shall be assessable to NIMA organizations and contractors as determined by the Government.
- 3.3.1.16 The Contractor shall ensure that all assigned personnel are cleared to the appropriate level of the program to which they are assigned, to include ISSA clearances for the Special Access Programs (SAP) which may require ISSA interface.

3.3.2 Contract Cost Control

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- 3.3.2.1 The Contractor shall maintain a cost control and reporting system that provides the cost and schedule visibility. The Contractor shall develop and submit a monthly Cost Report (CDRL A022), available electronically within 10 business days after the accounting month end. The report shall include timely cost data by WBS, to include actual, budgeted, and forecasted hours and funds, a narrative analysis of deviations, and recommendations. The Contractor shall also provide weekly electronic "flash" reports that provide the same information for those WBS elements that are over or under running a Government determined threshold.

3.3.3 Functional Process Improvement

- 3.3.3.1 The Contractor shall, within 45 days of contract award, provide a plan for implementing a process improvement program (CDRL A023). The program shall employ processes and best practices consistent with a Capability Maturity Model (CMM) (or equivalent process maturity model) Level 3 or higher, and appropriate for NIMA's systems engineering, acquisition management, Operation and Sustainment, and life cycle support (to include training) responsibilities.
- 3.3.3.2 The Contractor shall define, develop, and assess process maturity and progress using a nationally recognized integrated maturity model appropriate for NIMA's systems engineering, acquisition management and life cycle support responsibilities.
- 3.3.3.3 The Contractor shall provide Enterprise Engineering support such that the key results of pre-existing process improvement initiatives are used as appropriate in migrating NIMA to a CMM Level 3 capability. The Contractor shall identify any opportunities for improving processes and shall implement those process improvements as approved by the Government.
- 3.3.3.4 The Contractor shall develop or procure, after government approval, requisite process documents, procedures, guidebooks, templates and procure tools necessary to implement and monitor compliance with the processes and procedures.
- 3.3.3.5 The Contractor shall in coordination with Director of Training and Doctrine develop and conduct process improvement training for NIMA personnel.
- 3.3.3.6 The Contractor shall monitor and audit compliance of NIMA and associated contractors with the Government approved and implemented processes.

3.4 Special Studies and Contingencies

3.4.1 Ad Hoc Studies

- 3.4.1.1 The Contractor shall perform ad hoc studies, analysis, and contingency engineering support activities as determined by the Government. The Contractor shall provide associated technical reports and papers (CDRL A021), as requested by the Government.